

Skirting board, floor covering system and method for manufacturing a skirting board.

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- 5 This invention relates to a skirting board, a floor covering system, in particular a floor covering system applying such skirting board, and a method for manufacturing such skirting board.
- 10 It is known that a floor covering can be formed by means of floor panels which are laid on a subfloor and preferably are mutually joined either by means of a glued-together tongue and groove coupling, or by means of coupling parts effecting an interlocking of the floor
- 15 panels. Examples of mechanically locking coupling parts, which are integrated in the floor panels, are known, amongst others, from the international patent applications WO 97/47834, WO 01/98603 and WO 01/96688.
- 20 Such floor panels may be of various construction, whereby mostly, use is made of a substrate or core, on top of which a top layer, whether or not formed of several layers, is provided. The core mostly consists of a plate of a wood-based material, for example, fibreboard or
- 25 chipboard, more particularly MDF (Medium Density Fibreboard) or HDF (High Density Fibreboard), although the use of other materials for the core, for example, synthetic material, so-called compact laminate and the like, is not excluded. The top layer may be realized on
- 30 the basis of synthetic material or another material, for example, veneer, a wood layer with a thickness of several millimetres, cork, linoleum, stone or the like.

In case the top layer consists of veneer or a wood layer with a thickness of several millimetres, a skirting board pertaining to the flooring can simply be realized from solid wood of the same kind of wood as the veneer of the top layer.

In the case that the top layer of the floor panels is realized on the basis of synthetic material, for example, is formed of one or more pressed and cured resin-impregnated carrier sheets, amongst which a printed decor layer, which are provided on a core layer, more particularly DPL (Direct Pressure Laminate) or HPL (High Pressure Laminate), the problem arises that it is rather difficult to realize a skirting board that is optimally matched to the flooring, and such in a industrially and economically responsible manner.

Up to now, in combination with such floor panels skirting boards are applied that are covered by a printed film, whereby said film is glued onto the actual skirting board. Those known skirting boards show the disadvantage that the print of the film of the skirting board is never optimally matched to the print of the decor layer of the floor panels, in view of the fact that usually, one starts from different manufacturing and printing techniques and furthermore such film and decorative layer also are realized at different manufacturers'. Besides, developing a new adapted print for the film of the skirting boards for each newly developed pattern for the decor layer is expensive. Another disadvantage of such film-covered skirting boards consists in that, due to the nature of the film material, namely, simply printed paper or synthetic material, they never show one and the same

appearance as the surface of the floor panels that is obtained by means of a pressing and curing procedure.

5 Also, such film does not allow to realize well-defined effects on the surface, which indeed are possible when manufacturing the floor panels, such as providing impressions, whether or not in register with the underlying printed pattern, providing impressions which are filled with a colour component or another component,  
10 finishing the surface, for example, glossing it, and so on.

Another important disadvantage of such film-covered skirting board consists in that it is impossible to  
15 realize skirting boards whereby the front side and the upper side adjoin each other at an angle, because, when applying a covering film, always a certain rounding radius must be provided.

20 From the patent documents FR 2.192.895 and FR 1.530.769, it is also known to provide covered plates with an edge covering. The manufacturing of such plates, however, is situated in another technical field than the production of skirting boards, resulting in that the skilled person  
25 will not see an evident solution for constructing skirting boards in the aforementioned documents.

The present invention aims at a skirting board which is constructed such that a solution for one or more of the  
30 aforementioned disadvantages is provided.

According to a first aspect, the invention thus relates to a skirting board with the characteristic that it consists of at least two structural parts, a first part

forming at least a portion of the front side, and a second part forming at least a portion of the upper side of the skirting board, respectively, whereby both parts are formed from a laminate material formed by means of pressing power, with a core and, provided thereupon, a top layer on the basis of synthetic material. As the skirting board according to the invention is composed of two parts each consisting of a laminate material, the realization of the skirting board of the invention is no longer restricted by the limitations of the use of a covering film, and all effects can be created that are possible with the floor panels, too. Also, it is possible to realize skirting boards with a front side and an upper side mutually adjoining at an angle, without having to take a rounding radius into account. Also, the skirting board according to the invention has a surface quality entirely corresponding to that of the floor panels.

It is noted that by structural parts, it is meant that these parts have a core or substrate, on top of which a top layer is provided, contrary to, for example, thin laminate ribbons which sometimes are used for covering the lateral edge of a laminate board. Basically, such laminate ribbons might also be used for covering the upper side of a skirting board, however, it is known from practice that the use of such laminate ribbons in general has the disadvantage that they can loosen very easily and that the connection with the front side is not always perfect.

Preferably, said two parts are formed of a plate-shaped material, with the advantage that this material can be manufactured in one and the same production process or a similar production process as the basic board from which

floor panels are formed. Thereby, the basic material of the skirting boards can be manufactured, for example, with the same presses as those applied for manufacturing the floor panels, without the necessity of taking particular measures when pressing.

Preferably, said two parts are manufactured of a similar or one and the same laminate material and are provided with one and the same pattern, such that, consequently, the appearance of the front and upper sides completely match each other. More particularly, it is preferred that said two parts originate from one and the same laminate plate, such that possible minor differences that, for which reasons whatever, might occur in the production of subsequent laminate plates, never result in differences between the front and upper sides of one and the same skirting board.

In the most preferred form of embodiment, said two parts adjoin each other at least at the height of the outer side of the skirting board, and they show patterns at their visible sides which fade into each other, whereby, for example, in the case of a wood motive, it is obtained that the grain of the wood at the upper side fades into the grain of the wood at the front side, which creates an appearance as if the skirting board consisted of solid wood.

In the first place, the invention is useful with classical laminate of the type whereby the top layer of said two parts is formed of one or more pressed, resin-immersed layers, amongst which a so-called decor layer that is printed either with a uniform print or with a well-defined pattern imitating, for example, wood,

ceramics, stone or the like. More particularly, it is preferred that said laminate material of at least one of said two parts, and preferably of both parts, consists of so-called DPL (Direct Pressure Laminate) or so-called HPL (High Pressure Laminate) that is attached to a substrate or core.

The aforementioned two parts can be attached to each other directly or indirectly, for example, by means of glue or in any other manner.

As aforementioned, the skirting board according to the invention can be realized without a rounding between the front and upper sides, whereas the decorative top layers still adjoin each other. Therefore, according to a preferred form of embodiment, said two parts with their outer sides will adjoin each other at an angle.

According to an important preferred form of embodiment, said two parts extend with their top layer at an angle of 90 degrees in respect to each other, whereby thus a skirting board with a rectangular outer side is obtained.

Preferably, said two parts at least partially adjoin each other with a mitre joint, whereby this mitre joint preferably extends at least up to the outer side of the skirting board. Hereby, at least in those embodiments in which said parts are situated directly against each other, an adjoining of the top layers in the external angle of the skirting board without visible seams is obtained. Hereby, the mitre preferably extends according to an angle coinciding or approximately coinciding with the bisecting line of the external angle of the skirting board. However, other possibilities are not excluded.

In a particular form of embodiment, the top layer of at least one of said parts, however, preferably of both parts, is provided with impressions, more particularly impressions imitating a relief, for example, of a natural material, such as wood pores, unevenness of a stone surface or the like. Hereby, these impressions possibly may correspond to the pattern, more particularly the printed pattern, of the top layer, which often is called "registered embossment". This latter is particularly useful when imitating wood, because in this manner a very realistic imitation can be obtained.

According to another particular form of embodiment, use is made of a laminate material, whereby in said impressions, or at least in a part thereof, a component is provided in the form of a colouring product and/or an active component. By means of such colouring product, special effects can be realized that also are applied for floor panels, such as, for example, imitating lime-washed wood. By using an active component, other effects can be created. By an active component, amongst others, anti-bacterial, mildewproofing, fluorescent, antistatic, sound dampening and other components are to be understood.

According to another particular form of embodiment, parts are used whereby the top layer comprises a decor layer, whereby above the decor layer, whether or not directly thereupon, at least one coloured overlay is present, which also allows to realize particular effects, as this is the case with floor panels.

So, for example, a very realistic imitation of coloured, and more particularly lime-washed wood, also called

"cérusé", can be obtained by forming the parts of a material having a top layer with a decor layer representing a wood pattern, whereby this top layer is provided with impressions in which a colouring component is applied, and moreover by applying a coloured overlay. The impressions, filled with the colouring component, imitate the colour remaining in the pores of a coloured real wooden floor, whereas the coloured overlay imitates the thin tinge of colour remaining on the smooth wood surface when colouring real wood.

In respect to said impressions, the use of components in these impressions, the use of coloured overlays, as well as performing special finishing operations, such as the glossing of the surface of the top layer, reference is made to the patent applications WO 01/96689, BE 2003/0339 and BE 2003/0585, whereby the information which is given in these patent applications, although described for floor panels, should be considered incorporated by reference in the present application, however, as being applied to said skirting board.

According to a particular possibility, at the height of the corner edge formed by said two parts, a material part is removed, preferably in the form of a bevelled edge, whereby then a decorative layer is applied on the obtained surface, for example, in the form of a lacquer, varnish, impregnating agent, whether or not coloured, transfer print or other print.

It is clear that the core of said parts preferably consists of the same material as the core material applied when manufacturing floor panels. In the most preferred form of embodiment thus MDF or HDF are used.



MDF and HDF also show the advantage of being materials that are easy to machine, which is important when forming said two parts.

5 In principle, said core may consist of any material. Other examples thus are particle board, extruded wood, extruded paper pulp or other board materials, whether or not on the basis of wood. In the case of extruded wood or paper pulp, it is not excluded to start from basic parts,  
10 which already are extruded in the shape of the final skirting board, or more or less in the shape thereof, and are laminated afterwards in order to arrive at the two structural parts.

15 In the case that a hydrophilic material, as, for example, MDF/HDF is used, the bottom side of the skirting board possibly can be treated with a hydrophobic material, a sealing material, or the like.

20 Preferably, said two parts respectively consist of a larger standing part forming the front side of the skirting board and a smaller top part provided on top of the standing part and forming the upper side of the skirting board.

25 For practical reasons, it is preferred that said two parts are formed of plate-shaped material and that the sides of those parts facing each other are realized by means of a machining operation, i.e. a material-cutting  
30 operation. In fact, board-shaped material, which has been obtained by means of processing by a press, is subjected to relatively large thickness tolerances. However, by attaching the two parts against each other exclusively with sides obtained by means of a machining operation,

which operation can be realized with very small tolerance deviations, the influence of thickness tolerances of the original board-shaped material is avoided.

5 In an important preferred form of embodiment, the two parts are formed of a board-shaped material which, opposed to the top layer, also comprises a backing layer, whereby the part forming the lateral edge of the skirting board still comprises this backing layer, whereas the  
10 backing layer at the part forming the upper side of the skirting board has been removed.

Preferably, the components of the skirting board, and more particularly said two parts, have matching forms,  
15 for example, in the shape of a male and a female part, which, when joining these parts, effect an automatic mutual positioning. So, for example, the sides of the mutually adjoining parts can be realized with an internal angle, external angle, respectively, fitting into each  
20 other. When pressing the parts against each other, they consequently automatically are put in a correct mutual position, which excludes an imprecise adjoining of the top layers at the external corner of the skirting board.

25 Although the skirting board according to the invention preferably consists of only two parts, it is not excluded to compose it of more parts. Hereby, it is also possible to use a common support or connecting structure to which said two or more parts are attached. The same support or  
30 connecting structure then is preferably used for attaching the skirting board assembly at the wall, possibly by cooperation with other attachment accessories.

It is clear that the components of the skirting board, and more particularly said two parts, do not necessarily have to be attached to each other by means of a glue connection, but that any kind of connection can be applied for this purpose. According to a particular form of embodiment, thus two or more of the components, and more particularly said two parts, can be interconnected by means of profiled areas engaging each other, which preferably provide for a snap connection, whereby the use of glue or separate elements, such as staples, nails, screws or the like can be excluded.

It is clear that the skirting board can show a globally straight shape as well as any other shape. So, for example, it may be realized with a functional profiled rear side, as, for example, a rear side with a re-entering part in order to limit the contact with the wall or floor, a rear side that is intended to cooperate with one or more attachment accessories, such as attachment clips, a rear side that is provided with one or more recesses, for example, for accommodating cables, and so on. The recesses may be either continuous or discontinuous in the longitudinal direction. Preferably, the removed material of the profiled part at the rear side of the skirting board provides for a sufficient flexibility of the skirting board. This flexibility also allows for a proper adjoining of the skirting board in the longitudinal direction against an uneven or not straight wall. The space created in the rear side of the skirting board can be used when packaging the latter for accommodating the necessary attachment accessories therein.

The invention is not restricted to skirting boards with a classical appearance, in other words, skirting boards having a uniform appearance or continuous pattern continuing over their length. So, for example, the top layer of said two parts can be realized with a printed tile pattern with joints extending over the front side and upper side of the respective skirting board. Hereby, possibly at the height of the imitated joints, a relief difference may be present, which is preferably formed by an impression, removal of material or a recess. The relief difference whether or not can be combined with a difference in the surface structure. Possibly, only a difference in the surface structure can be applied for imitating the joint.

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Another problem arising with traditional skirting boards that conventionally have a length of two or more meters, is that the application thereof may lead to certain disadvantages. So, for example, skirting boards of such classical length may easily be damaged during transport. Also, they are difficult to transport together with traditional laminated floor panels, as their length is considerably larger than the length of such floor panels.

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When continuous skirting boards are realized with a repeated tile pattern, which skirting boards are intended for being used with tile-shaped laminated floor panels, also the disadvantage is created that it is difficult to create a skirting board in which the distance between the successive imitated joints corresponds to the distance between the imitated joints of the floor panels, in particular when one would start from a basic plate with one and the same tile pattern for forming the skirting board and forming the floor panels in accordance with the

first aspect of the invention. As, when manufacturing the tile-shaped laminated floor panels, at the height of each joint a portion is sawn off and milled off, whereas this is not the case when manufacturing a continuous skirting board of the same material, it is clear that the distance differs between the joints of the skirting board and the joints of the floor panels. Thus, it is not possible to provide such skirting board having joints imitated thereupon in accordance with the joints of the floor panels along an installed floor.

Even if one would start for the skirting board from a basic plate with a separate decor layer, whereby the joints are represented closer to each other, the disadvantage remains that it is impossible to guarantee a perfect conformity between the joints on the skirting boards and the joints at the tile-shaped floor panels. In fact, such printed decor layer is subjected to extension and shrinkage, which renders it difficult to guarantee a fixed distance between the joints on the skirting board.

In order to remedy one or more of said disadvantages, according to a second aspect the present invention provides a skirting board, more particularly a skirting board with a laminated surface on one or more sides, which is characterized in that it is composed of short pieces, more particularly shorter than the aforementioned length of two meters, which can be mounted successively in longitudinal direction. It is clear that thereby industrially produced lengths of skirting boards are concerned.

According to a first possibility of this second aspect, one will work with pieces, the length of which is almost

equal, equal to or shorter than the length of the floor panels with which the skirting board is intended to be applied. In this manner, rather short pieces are obtained, which, on the one hand, will less easily become  
5 damaged and, on the other hand, can be easily transported together with boxes of packaged floor tiles, either by sending them along therewith separately, whether or not in their own box, or by packaging them together with floor panels in on and the same box.

10 According to another possibility of the second aspect of the invention, the pieces are realized with such a length that they precisely correspond to the length of a tile-shaped floor panel, whereby then a joint is imitated at  
15 the extremities of each piece, with the result that a skirting board can be realized of such pieces whereby the joints can precisely correspond to the joints of the tile-shaped floor panels. In fact, said pieces can be manufactured with small length tolerances, like the tile-  
20 shaped floor panels, so that differences will hardly occur.

Also, it is not excluded to realize the length of the pieces with a multiple of the length of a tile.

25 It is clear that the present invention also relates to the pieces themselves of which such skirting board is composed.

30 According to a particular form of embodiment, the successive pieces can be provided with coupling means for coupling them, whether directly or not, to each other. Hereby, those may be coupling means on the extremities that engage each other and effect a mechanical locking,

and/or coupling means with which each piece can be provided on a common underlying support structure, for example, a strip of MDF/HDF, synthetic material, metal or the like, or common attachment clips, whereby this support structure then, for example, first is attached to the wall.

The coupling means on the extremities may have different forms and consist, for example, of a tongue and groove, whether or not combined with locking means that also effect an interlocking in the longitudinal direction of the skirting board pieces.

According to another particular form of embodiment, the successive pieces are provided with positioning means, which are realized such that the successive pieces, due to their placement, automatically are aligned in mutual respect, or at least are aligned at least partially in mutual respect. The positioning means, for example, can realize a proper alignment of the upper sides and/or front sides of two skirting boards that are mounted against each other. According to a preferred form of embodiment, the successive pieces of the skirting board are provided with coupling means as well as positioning means, which, whether or not, are formed by means of the same parts.

According to a particular form of embodiment, the pieces of skirting board comprise, at their extremities, coupling means extending both parallel to the front side and parallel to the upper side, in such a manner that a locking in three directions is obtained, namely the two directions in the plane of the front side and the direction perpendicular to this front side.

Said imitation of a joint at the height of the extremities of said pieces of the skirting board can be realized in different ways. Preferably, this is performed according to one of the following possibilities:

- by means of a print;
- by means of an impression;
- by means of a print combined with an impression;
- by means of a removed material portion along the edge of the joint;
- by means of a removed material portion in the shape of an inclination or so-called bevel, upon which, whether or not, a separate decorative layer is provided;
- by means of a difference in surface structure between the joint and the tile pattern.

It is noted that the invention also relates to a skirting board whereby one or more characteristics of said first aspect are combined with one or more characteristics of said second aspect of the invention.

The present invention also relates to a floor covering system consisting of floor panels and skirting boards, whereby the floor panels are formed by laminated panels with a core and a top layer based on synthetic material, more particularly resin, pressed thereupon, preferably so-called DPL (Direct Pressure Laminate), with the characteristic that hereby skirting boards according to the first aspect of the invention are applied and that the top layers of the skirting boards and the floor panels are matched to each other.



Preferably, these top layers are matched to each other in that they show one or more of the following features:

- the skirting boards and the floor panels have been realized by a similar manufacturing process;
- both top layers consist of so-called DPL (Direct Pressure Laminate);
- the top layers are formed by means of identical decor layers, more particular identical paper layers printed with a pattern and impregnated with resin;
- the top layers are finished in a similar manner, more particular, both are provided with one or more of the following finishes:
  - impressions in the surface;
  - impressions in the surface, which are in register with the pattern of a decor layer applied in the top layer;
  - impressions in the surface, in which a component is provided, either a colour component or an active component;
  - a finishing treatment of the surface, whereby the feature thereof is altered, such as, amongst others, a glossed surface.

Further, the invention also relates to a method for manufacturing skirting boards according to said first aspect, whereby this method is characterized in that, by means of pressing power, a laminate material, with a core and a pressed-thereupon top layer on the basis of synthetic material, is formed; that from this laminate material, the aforementioned two parts are formed by means of one or more machining operations; and that said

two parts are connected to each other directly or indirectly.

5 Preferably, hereby strips are formed of the laminate material; these strips are joined with a mitre joint and attached to each other; and subsequently portions are removed from the joined strips, more particularly, are  
10 sawn off, in order to obtain a skirting board. As the assembly takes place by means of larger strips, after which then a portion of one or both strips is sawn off, the strips can be properly clamped when assembling them.

According to a particular technique, said strips are assembled in a tubular shape, such that by sawing this  
15 tubular arrangement in a suitable manner, several skirting boards are obtained at a time. Such tubular structure offers the advantage that the different strips can easily be assembled until they are adhered to each other. It is noted that such tubular structure  
20 preferably, however, not necessarily, is realized with a square or rectangular shape.

According to another technique of the invention, one starts from a lath or strip, which preferably is sawn off  
25 a plate, whereby both longitudinal edges are provided with a profile, after which this lath is cut in longitudinal direction, for example, sawn, and the two obtained parts that formerly were situated at the longitudinal edges are assembled such that a skirting  
30 board in accordance with the invention is obtained.

According to a particular characteristic of the invention, the basic plates for forming said parts of the skirting board and the floor panels are realized by means

of a similar manufacturing process, with the only essential difference that, for forming the parts of the skirting board, one starts from a plate-shaped material having a thicker core than the plate-shaped material used  
5 for forming the floor panels.

According to a preferred method, one starts from pieces of laminate material having coupling means at two opposite sides, such that, after assembling the two  
10 parts, also coupling means at the extremities of the skirting board are created.

More particularly, in case that the skirting board shows a tile pattern and the skirting board is intended for  
15 being used with a floor covering of the type consisting of separate floor panels, which in their turn each represent a tile, with or without imitation of a joint, a method is recommended whereby the structural parts of the skirting board are manufactured from panels of the  
20 respective floor covering. Such method provides for that the dimensions of the skirting board are identical to the dimensions of the floor, such that the possible imitation of a joint on the skirting board perfectly coincides with the same imitation on the floor covering. This method  
25 also provides for that the skirting board, at its extremities, will be provided with the same coupling means as the floor covering.

Although the use of a thin ribbon-shaped part at the  
30 upper side of the skirting board instead of a structural part, as aforementioned, leads to certain disadvantages, it is noted that the use of such ribbon-shaped part still can offer particular advantages when thinking about applying certain finishing treatments. Such finishing

treatments might also be performed on a film, more particularly a thin laminate film, before and/or after such film has been cut to ribbons or strips, after which the obtained ribbons or strips are attached to the upper  
5 side of the skirting board. Hereby, not only the advantage is created that a laminated surface is obtained at the front side as well as at the upper side, but that similar treatments and, thus, effects can be created at those surfaces, which also can be optimally matched to  
10 the floor panels.

Also, it is not excluded to provide the front side of the skirting board with such film, or the upper side as well as the front side.

15 According to a third aspect, the invention thus also relates to a skirting board, characterized in that it has a laminated surface both at the front side and the upper side, which surface is obtained by means of a press  
20 operation, whereby at least one surface is formed by a previously formed laminate film, whereby both laminated surfaces have been subjected to one and the same or a similar finishing treatment.

25 The finishing treatments are, for example, one or more of the treatments described above, such as providing impressions that follow the pattern, filling the impressions with a component, glossing the panels and the like.

30 When the laminate film is combined with a classical laminate, for example, when the body of the skirting board and the front face are formed by a core with a top layer pressed thereupon, for example, of the DPL type,

and the upper side consists of a subsequently adhered laminate film, preferably use is made of one and the same décor layer. Preferably, the laminate and the decor layer are realized in one and the same press, in the case of impressions even with one and the same press platen.

According to its fourth aspect, the present invention relates to a skirting board, with as a characteristic that it consists at least of a first part forming at least a portion of the front side of the skirting board, and a second part forming at least a portion of the upper side of the skirting board, whereby both parts are formed of the same piece of laminate material, with a core and a top layer of the DPL type, and whereby the second part consists of a part obtained in that a material portion is removed from the material of the core of the laminate material, whereby the first part and the second part have been brought together by turning them towards each other around a folding or breaking line.

The folding or breaking line preferably is determined by a locally weakened zone, although this does not necessarily have to be so. In the case of a locally weakened zone, the latter preferably is located at the rear side of the top layer, although the use of such weakened zone at the front side is not excluded.

Such skirting board has the advantage that the front side and the upper side of the skirting board may show continuous patterns. Moreover, the skirting board may be assorted with the floor covering, as it possibly may be manufactured of the same laminate material as the floor covering itself.

Another advantage with a skirting board according to the fourth aspect of the invention consists in that, due to the fact that for the top layer, DPL is applied, which latter, as known, is thin and brittle, a very fine fold or break can be obtained when turning the first and second parts towards each other.

In a preferred form of embodiment, the skirting board has the characteristic that said two parts are folded and/or broken in respect to each other around a folding or breaking line, which originally had been present as a weakened material zone partially realized up into the top layer. In the combined condition of said two parts, the realization of such weakened material zone up into the top layer results in that the quality of the edge where both parts adjoin each other is better than might be expected.

It is noted that the application of such weakened material zone partially extending up into the top layer also is useful when composing skirting boards with other kinds of top layers than DPL in the aforementioned manner, for example, also in the case of laminate materials with a top layer formed by HPL (High Pressure Laminate). The application of such weakened material zone extending partially up into the top layer, with any form of laminate, more particularly synthetic material laminate, thus can be seen as a particular additional aspect of the invention.

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Further, the invention also relates to a method for manufacturing skirting boards according to said fourth aspect. To this aim, the invention relates to a method with as a characteristic that, by means of pressing

power, a laminate material with a core and a pressed-  
thereupon top layer of the so-called DPL type is formed;  
that, for forming the skirting boards, one starts from  
laths or strips of said laminate material, whereby at  
least at one longitudinal edge of these laths, a material  
part is removed, such that said first and second parts  
are formed, whereby both parts remain connected at least  
by a portion of the top layer, and possibly by a weakened  
core portion below the top layer; and that said parts are  
turned towards each other and are joined and attached to  
each other.

Preferably, at least one of said parts is structural.  
Then, the second part consists at least of a portion of  
the top layer, whether or not provided with a portion of  
the core below the top layer.

Preferably, the two parts are gradually forced towards  
each other in a continuous process, whereby the second  
part, by means of a torsion movement, gradually is pushed  
into the direction of the first part, preferably by means  
of a sliding block or other guide means extending at  
least over a considerable length, for example, over 1 m  
or more. This gradual turning has the advantage that a  
high-quality edge between the two parts is obtained in a  
very repeatable manner. The process results in a rather  
straight break line of the DPL.

If desired, a post-treatment can be performed at the  
obtained edge after joining said two parts, at the height  
of the exterior side of the skirting board, where said  
two parts adjoin each other. This post-treatment may  
consist of colouring the edge with a colour, whether or  
not matching the top layer of both parts, removing an

amount of material, or the like. Also, the post-treatment may consist of a sanding treatment or the removal of a larger material portion, for example, in order to form a bevel, after which, whether or not, a decorative layer can be provided on the treated surface, for example, in the form of a lacquer, varnish, impregnating agent, whether or not coloured, transfer print or other print.

According to a fifth aspect of the invention, it relates to a skirting board with as a characteristic that this skirting board has a laminated surface both at the front side and the upper side, whereby at the edge between the upper side and the front side, an amount of material has been removed, preferably in the form of a bevel, and whereby the obtained surface is provided with a decorative layer. According to this aspect, by a laminated surface each form of laminate can be understood. A general advantage thereof is that a proper edge finish can be obtained and in particular the occurrence of problems as a result of a difficult mutual adjoining of the laminated surfaces is excluded.

The decorative layer can be of any kind and may consist, for example, of a lacquer, a print, such as a transfer print, an impregnation, and so on.

It is noted that the surface for providing the decorative layer possibly can be subjected to a smoothing treatment, for example, by contacting the surface with a pressing-on element, such as a sliding block, pressure roller, or the like. More particularly, hereby use shall be made of a pressing-on element that is brought to a high temperature. This is particularly advantageous when



applying MDF or HDF, as possibly protruding wood fibres then are flattened and are consolidated with the surface. Also, then possibly a kind of sealing can be created at the surface by the heating of the binding agent present in the MDF or HDF. In this manner, a very smooth surface is obtained, as a result of which also a smooth lacquer layer, transfer print or the like can be realized.

The technique, mentioned in the preceding paragraph, of smoothening also can be applied in general with laminated floor panels for treating a bevel or the like at such panels, for example, in order to subsequently provide a decorative layer on the treated surface. Here, too, this technique is particularly useful for floor panels whereby the aforementioned surface of the bevel or the like extends through MDF or HDF.

According to a sixth aspect, the invention relates to another particular form of embodiment of a floor panel. The characteristics and advantages hereof will become clear from the detailed description.

With the intention of better showing the characteristics of the invention, hereafter, as an example without any limitative character, several preferred forms of embodiment are described, with reference to the accompanying drawings, wherein:

figure 1 represents in perspective view a portion of a skirting board according to the first aspect of the invention;

figure 2 represents a cross-section according to line II-II in figure 1;

figure 3, at a larger scale, represents the portion indicated by F3 in figure 2;

figures 4 to 12 represent different variants of the skirting board according to the invention;

5 figure 13, at a larger scale, represents the portion indicated by F13 in figure 12;

figures 14 and 15 represent views analogous to that of figure 13, for two variants;

10 figure 16 represents another form of embodiment of a skirting board according to the invention, in mounted condition;

figure 17 represents a view similar to that of figure 3, however, for a variant;

15 figure 18 represents a floor covering system according to the invention;

figure 19 represents another skirting board according to the invention;

20 figure 20 schematically represents a method for manufacturing the skirting board according to the invention;

figure 21 and 22 represent two particular techniques that can be applied when manufacturing such skirting board;

25 figure 23 represents a floor covering system with a skirting board that is realized in accordance with the second aspect of the invention;

figures 24 and 25, at a larger scale, represent cross-sections according to lines XXIV-XXIV and XXV-XXV in figure 23;

30 figures 26 and 27 represent views analogous to that of figure 24, for two variants of the skirting board according to the invention;

figures 28 to 30 represent another skirting board according to the invention;

figures 31, 32 and 33, at different scales, represent cross-sections according to lines XXXI-XXXI, XXXII-XXXII and XXXIII-XXXIII, respectively, in figure 30; figure 34 shows a possibility for realizing a skirting board according to the invention; figure 35 is an enlargement of the portion indicated by F35 in figure 34; figure 36 is an enlargement of the portion indicated by F36 in figure 34, for the final form of the skirting board; figures 37, 38 and 39 represent views similar to that of figure 36, for different variants of the invention.

As represented in the form of embodiment of figures 1 to 3, a skirting board 1, which is realized in accordance with the first aspect of the invention, consists of at least two structural parts 2-3, a first part 2 forming at least a portion of the front side 4 of the skirting board 1, and a second part 3 forming at least a portion of the upper side 5 of the skirting board 1, respectively, whereby both parts 2-3 are formed of a laminate material 6, which is formed by means of pressing power, with a core 7 and a synthetic material-based top layer 8 applied thereupon. As will become clear from the further description, the parts 2-3 preferably are formed of a plate-shaped laminate material 6, whereby for forming the two parts 2-3, one preferably has started from a similar or one and the same laminate material, which preferably shows one and the same pattern.

The core 7 of the parts 2-3 consists, for example, of MDF or HDF, whereas the top layer 8 preferably consists of one or more resin-impregnated layers, which are pressed upon the core. In figure 3, by way of example a detail is

represented, in which the top layer 8 is composed of two layers, a so-called decor layer 9, which preferably is provided with a print, and a so-called overlay 10, respectively. Said print may represent a well-defined pattern, for example, a wood pattern, a stone pattern or the like, or may also consist of a monochrome print. The resins applied with these layers preferably are melamine resins, however, other possibilities are not excluded.

At the rear side, in this case, of part 2, a so-called backing layer 11 may be present.

Preferably, the laminate material 6 formed by the core 7, the top layer 8 and the possible backing layer 11, is realized as so-called DPL (Direct Pressure Laminate).

In the embodiment of figures 1 to 3, the parts 2 and 3 are directly attached to each other by being glued together at their sides 12-13 directed towards each other.

As clearly visible in figures 2 and 3, said two parts 2-3 adjoin each other with their outer sides 14-15 at an angle, whereby the top layers 8 extend at an angle of 90 degrees up to the outer corner 16 of the skirting board 1.

In order to obtain that the top layers 8 neatly adjoin each other at the location of the outer corner 16, said parts 2 and 3 are realized such that, at least at the height of the outer corner 16, adjoin each other in a mitre joint.

It is clear that the parts 2 and 3 may be realized in different shapes. For clarity's sake, in the following a number of variants is described with reference to figures 4 to 16.

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Figure 4 shows an embodiment in which the second part 3 is made triangular and fits into a triangular recess 17 in the upper side of the first part 2.

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Figure 5 shows an embodiment in which the upper side 5 is realized inclined.

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Figure 6 shows an embodiment, in which the second part 3 is trapezoid and fits into a similarly formed recess 18 in the upper side of the first part 2.

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It is noted that in the forms of embodiment of figures 1 to 6, the sides 12 and 13, which are turned towards each other, have been created by a machining operation, as a consequence of which the parts 2-3 can be realized very accurately and thus fit very precisely into each other, whereby the seam at the outer corner 16 is not or almost not visible. However, this does not exclude other possibilities. So, in figure 7 an example is represented, whereby at the second part 3 still a portion of backing layer 11 is present and thus on that location no surface, obtained by a machining operation, is present, which, as discussed in the preamble, in certain cases may lead to a less precise embodiment.

30

Also, it is noted that, by using shapes that fit into each other, as is represented, for example, in the forms of embodiment of figures 4, 6 and 7, automatically a

mutually correct positioning is obtained when assembling the parts 2 and 3.

5 In figure 8, the second part 3 protrudes towards the rear, such that a space or receding portion 20 is formed at the rear side 19 of the skirting board 1, whereby the contact with the floor and/or wall is restricted when the skirting board is installed, such that a better adjoining can be guaranteed when the wall is irregularly formed at  
10 the bottom. As represented in figure 8, also one or more additional recesses may be formed in the rear side of the first part 2, having the same purpose.

15 Figure 9 shows a variant, whereby at the location of the corner edge a material portion has been removed, in this case in the shape of a bevel 22, upon which a decorative layer 23 is applied, for example, according to any of the techniques mentioned in the introduction.

20 Figure 10 represents an embodiment, whereby the parts 2-3 are attached to a common support structure or connecting structure, in this case a common basic profile 24. Hereby, the assembly of the components possibly may or may not be performed at the manufacturers'.

25 Figure 11 shows a variant, whereby an insert 25 is provided between the parts 2-3.

30 In figures 12 and 13, a variant is represented, whereby the parts 2 and 3, at their sides directed towards each other, are provided with parts 12A-13A and 12B-13B that are situated crosswise in respect to each other, such that, during the assembly of the parts 2 and 3, more particularly, the gluing thereof, pressing forces can be

exerted in two directions by means of pressing elements 26 and 27, for example, pressing rollers. By this technique, a mutual shifting of the parts 2 and 3 during the pressing together can be completely excluded.

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In figures 14 and 15, two variants are represented, whereby one of the two parts, in this case, part 3, has a bendable, more particularly elastically bendable, portion 28, in such a manner that, when assembling the parts 2 and 3, and by bending the part 28, a tension force is realized, which contributes to a good closure of the parts 2 and 3 at the location of the top layers 8. It is clear that hereby, preferably a space is present under the portion 28, said space allowing such pressing that the portion 28 can bend.

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In figure 15, the parts 2 and 3 are provided with positioning means, which in their turn prevent a lateral shifting of the parts 2 and 3 in mutual respect, which positioning means in this case are formed by a tongue-shaped part 29 at the part 3 and a groove 30 in the part 2.

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In figures 14 and 15 is also shown that glue chambers 31 for providing glue and/or collecting surplus glue can be provided at the necessary places.

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Figure 16 shows that at the rear side, not only a space 20 can be provided in order to reduce the contact of the skirting board 1 with the floor 32 or wall 33, but that also a profile 34 can be provided at the rear side, said profile being intended for cooperating with attachment accessories, in this case an attachment clip 35 that is attached to the wall 33.

30

In general, it is clear that, as a benefit of the invention, the top layers 8 of both parts 2-3 can be optimally matched to each other and that it is even possible to let the possible patterns, which are represented on the top layers of the parts 2 and 3, fade into each other.

Because one can start from plate-shaped material, also the advantage is created that all special effects, which can be created when forming plate-shaped material, can be integrated in a skirting board 1 in an identical manner, with the intended particular effect both at the front side 4 and the upper side 5 thereof.

In figure 17, an example of a particular effect is represented, whereby the top layer 8 of both parts 2-3 is provided with impressions 36 in which a component 37 is provided, for example, a colour component, by which, for example, as discussed in the introduction, lime-washed wood can be imitated.

It is clear that the use of such impressions 36 does not necessarily have to be combined with the use of a component that must be provided therein. Also, such impressions 36 can solely be applied for imitating a relief, more particularly for imitating natural surfaces.

Said impressions may be in register with a pattern represented on the décor layer. This is particularly useful when imitating wood, however, is also not excluded for imitating other materials.



Also, it is possible to apply a coloured overlay, whereby particular effects, whether or not in combination with the use of impressions that may be coloured or not, can be realized.

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Figure 18 shows a floor covering system according to the invention, with floor panels 38 and a skirting board 1, which are matched to each other in that they are manufactured of a similar laminate material.

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In figure 19, an embodiment of a skirting board 1 according to the invention is represented, whereby the top layer 8 of the two parts 2-3 is provided with a tile pattern with joints 39 extending over the front side 4 and upper side 5. In figure 19, those are wide joints obtained by means of a print. At the location of these joints, possibly an impression can be realized. Instead of joints obtained by means of a print, according to an alternative they can also be formed by material removal or recesses, whereby at the location thereof possibly a separate colouring or print is provided.

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Figure 20 schematically represents a possible form of embodiment of the method for manufacturing the skirting board 1. In a first step 40, a plate-shaped substrate 41, more particularly a material for forming the core 7, for example, an MDF or HDF plate, and a resin-impregnated printed decor layer 9, an overlay 10 and a backing layer 11 are brought together. In a second step 42, this assembly of layers is pressed together in a press 43 and consolidated by means of the resin. Hereby, simultaneously impressions can be formed in the upper side, for example, by means of an intermediate plate 44 that is provided with a relief 45. In this manner, a

plate of laminate material 6 is obtained. In step 46, a lacquer 47 or the like is rolled into the impressions. According to not-represented steps, then a forced drying of the lacquer 47 can be provided, as well as a cleaning in order to remove a possibly remaining tinge of lacquer. Subsequently, the laminate material 6 is divided into strips, more particularly sawn to laths 48. By machining treatments, from those then the parts 2 and 3 can be formed, for example, by means of the necessary milling and/or planing treatments, after which those parts 2-3 are connected to each other.

It is clear that different variants to this are possible. So, for example, it might be possible to provide the lacquer 47 in the impressions only after the skirting board 1 itself already has been manufactured.

It is noted that the laminate material also might be realized in a continuous press and that the possibly provided impressions also might be pressed into the surface in a separate press.

In figure 21, a particular method is represented in order to attach the parts 2 and 3 to each other. Hereby, laths or strips 48 are connected, preferably glued, to each other in a tubular shape and with a mitre, such as shown centrally in the figure. The tubular structure offers the advantage that the laths 48 can be clamped in a stable manner during gluing. By subsequently cutting, more particularly, sawing the tubular piece according to lines 49, four skirting boards 1 according to the invention are obtained.

In figure 22, a technique is represented whereby one starts from a lath or strip 50, which preferably is sawn off a plate, whereby in a first step 51, a profile is applied at both longitudinal edges 52-53, after which this lath 50, as represented in step 54, is cut in longitudinal direction, in this case by means of a saw 55. In this manner, two parts 2 and 3 for forming the skirting board 1 are obtained. In the represented step 56, another portion of the part 2 is removed, for example, milled away. Finally, the parts 2 and 3, as represented in step 57, are assembled, after which, as represented in step 58, they are attached to each other, in this case by means of glue. This technique offers the advantage that the edge 52 can be formed while the portion 3 still is present at the lath 50, whereby a proper clamping and/or guiding during milling is possible. Also, both edges 52 and 53 can be formed simultaneously by passing such lath 60 in between two oppositely-situated milling cutters.

Figures 23 to 25 relate to a skirting board and a floor covering system, whereby both the first and second aspects of the invention are applied. To this aim, the skirting board 1 consists of short pieces 59, which are mounted successively one after the other, whereas each piece 59 consists of at least two composed parts 2 and 3, as described above.

In the example, the pieces 59 are provided with coupling means by which they can be coupled to each other in an indirect manner. In the represented example, these coupling means consist of coupling parts 60 in the form of recesses, with which the pieces 59 can be clamped onto

a common profile 61 that, in its turn, is attached to the wall.

5 According to an important, although preferred characteristic of the second aspect, an imitation of a joint 62 is present at the location of each transition between two pieces 59. Possibly, additional joint imitations may be present between the extremities of each piece 59. In the represented example, the imitations of  
10 the joints 62 are realized by means of removed material portions, in this case in the form of bevels 63, which preferably are provided with a decorative layer or coating 64, for example, by means of a lacquer, print or impregnation.

15 According to another important preferred characteristic, the pieces 59 have a length that corresponds to the length of the floor panels 38 with which they are intended to be used, which is particularly useful for  
20 floor panels imitating stone tiles. In this manner, it becomes possible to realize skirting boards 1, whereby the joints 62 are situated precisely opposite to the joints 65 of the tile-shaped floor panels 38, as is illustrated in detail in figures 24 and 25.

25 In figures 26 and 27, two variants are represented, whereby, instead of using indirect coupling means, use is made of direct coupling means 66 in order to interconnect the pieces 59, which coupling means 66 allow for a  
30 connection between the narrow sides of the pieces 59, more particularly between the extremities or edge areas 67 and 68.

The coupling means 66 consist of first coupling parts 69, substantially in the form of a tongue 70 and a groove 71, which realize at least a well-defined locking in a direction R1 perpendicularly to the plane of the skirting board 1, and second coupling parts 72, which realize at least a well-defined locking in a direction R2 according to the length of the skirting board 1, whereby the second coupling parts 72 at least comprise, on the one hand, a part 73 which can be pressed down in an elastic manner, crosswise to the plane of the skirting board 1, whether or not perpendicularly thereto, which part 73 is situated at one of the edge areas 67-68, preferably at the edge area 68 at which the tongue 70 is present, and, on the other hand, a part 74 cooperating therewith, said part 74 preferably not being able to be pressed down or being less compressible, at the other edge area, whereby these two coupling parts 72 are situated in a zone behind the tip of the tongue 70, and even better entirely or almost entirely behind the zone T taken by the actual tongue 70. By "behind the tip or zone T" is meant that the coupling parts 72, and in the first place the locking contact surfaces of these coupling parts, are situated more towards the inside at those respective parts. In this case, the zone T must be considered as the distance with which the tongue is sitting behind the shortest groove-bordering lip.

The part 74, which cooperates with the part 73 as a hook-shaped part, preferably is situated on a protruding lip 76.

Figure 26 shows an embodiment in one piece, whereby the part 73 that can be pressed down is formed by a portion of an elastically bendable lip 77, whereby the impression

thus is the consequence of bending, whereas figure 27 shows a variant in which the compressible part 73 consists of an elastically compressible material, such as a relatively stiff rubber strip, whereby the impression  
5 thus is the result of a material compression. It is clear that the lip 77 also may extend in other directions. As represented, in both cases the part 73 is situated at the rear side of the tongue, in other words, the side which is directed towards the wall. According to a variant, the  
10 part 73 might also be situated at the front side.

In a laminate structure with pressed layers of resin, the layer that is situated against the lip 76 preferably extends up to or into the proximity of the coupling part  
15 74 in order to thereby maximally maintain the rigidity of the lip 76.

As schematically indicated by arrows, the coupling means hereby preferably are realized such that the pieces 59  
20 can be engaged into each other by shifting and/or turning. Hereby, turning around the front edge is the most practical technique, however, shifting may be necessary if pieces 59 have to be installed against a wall, at places that are difficult to reach. Hereby, the  
25 coupling can be realized without play.

The coupling means of figures 26 and 27 allow to smoothly shift and turn the pieces 59 into each other. In that, at least in the represented form of embodiment, the part 73  
30 can be pressed down almost separately from the remaining material parts, these remaining parts are stressed little or not at all.

It is noted that the coupling means described above by means of figures 26 and 27 for connecting the pieces 59 of a skirting board can be applied, according to the invention, in a similar manner for connecting floor panels, more particularly laminated floor panels, whether this takes place in combination with the application of a skirting board according to the invention or not. According to this sixth aspect of the invention, then the wall in the drawings must be omitted, whereby the front side of the pieces 59 then must be seen as the upper side of such floor panel. Such floor panels then can be laid in a floating manner, without connection to the subfloor. Preferably, such floor panels are rectangular and are provided on four sides, in other words, edges, with coupling means realizing a vertical and horizontal locking, whereby at two opposite sides, coupling means as described above are provided, whereas at the other two sides coupling means may be provided which are realized in another manner; preferably, however, not necessarily, coupling means allowing exclusively a coupling by turning-in and not by shifting. In the case of floor panels, the coupling parts preferably are realized from MDF, and even better, HDF, preferably in one piece out of the substrate of the floor panel.

In front view and a rear view, respectively, figures 28 and 29 show a further variant of a piece of skirting board 59 for realizing a skirting board 1 according to the invention, whereas figures 30 to 33 represent how several of such pieces 59 are mounted.

A first particularity of the form of embodiment represented in figures 28 to 33 consists in that the pieces 59 are provided with coupling means 66, with which

the pieces 59, at their extremity, can be directly coupled to each other. More particularly, the pieces 59, at their small faces, comprise coupling means extending parallel to the front side 4 as well as coupling means  
5 extending parallel to the upper side 5, differently designated by 66A and 66B. In the represented example, these coupling means 66A-66B are realized in a manner comparable to that of figure 26 and to this aim each substantially consist of first coupling parts 69 in the  
10 form of a tongue and a groove realizing at least a well-defined locking in a direction perpendicular to the side, the front side 4 or the upper side 5, respectively, of the piece 59 along which the coupling means 66A-66B are provided, and second coupling parts 72 realizing at least  
15 a well-defined locking in the longitudinal direction of the skirting board 1.

It is noted that by applying both coupling means 66A as 66B, these also function as positioning means providing  
20 in that the successive pieces 59 during the mounting thereof are automatically aligned in mutual respect both in height and in depth. It is clear that according to not-represented variants, also other positioning means can be applied in order to obtain a partial or complete  
25 alignment of the pieces 59 in respect to each other.

Figures 30 to 32 show that the coupling means 66A and 66B preferably are similar and even identical to each other. This offers the advantage that, in the case that the  
30 pieces 59 are manufactured of two structural parts 2 and 3, these parts can be manufactured starting from the same piece of material, more particular laminate material, which prior thereto has been provided with the respective coupling means at two opposite sides. By composing the



parts 2 and 3 manufactured therefrom in a mitre joint, then automatically a design is obtained as illustrated in figures 28 to 33.

5 The coupling means 66A-66B represented in figures 31 and 32 are of such a type that therewith a coupling by means of a turning movement W, as well as a shifting movement S can be realized, whereby at least in the latter case, then a locking by means of a so-called snap action is  
10 taking place.

The coupling of the pieces of skirting board 59 then may take place as illustrated in figure 31, in which the left piece 59 already is mounted against the wall 33 and the  
15 piece 59 shown at the right hand side in the figure first is presented inclined with one extremity against the already mounted piece, as illustrated in dashed line 78. By now turning the new piece 59 to be mounted against the wall 33 by means of the turning movement W, the coupling  
20 means 66A, as indicated in figure 31, engage each other. Thereby, automatically also an engagement at the coupling means 66B is created, whereby, seen purely in the vertical cross-section of figure 32, exclusively a lateral shifting into each other of the respective  
25 coupling means is taking place.

However, within the scope of the invention, it is not excluded that the coupling means 66A and 66B differ from each other. So, for example, may the coupling means 66A  
30 be of the type that exclusively allows to make a connection by means of a turning movement, whereas the coupling means 66B may be of the type that exclusively allows a connection by means of a shifting movement.

A second particularity of the form of embodiment represented in figures 28 to 33 consists in that the successive pieces 59 are provided with attachment means, which are constructed such that they are seated blindly by mounting the next piece of skirting board 59. In the represented example, these attachment means are formed by a strip of lath 79 provided against the rear side of each piece 59, which stroke or lath 79 facilitates the attachment of each respective piece 59 at the wall or at another common support structure, possibly by means of screws, glue, or the like. The strip of lath 79 is provided such that it extends with one extremity beyond the remainder of the piece of skirting board 59 and in this manner forms an attachment part, more particularly an attachment lip 80. As represented, this attachment part preferably is situated at the extremity where the coupling means 66A-66B show coupling parts 69 in the form of a groove. The thickness of the strip 79 preferably is such that the skirting board 1 in mounted position fits in a sufficient manner with its upper side 5 against the wall 33, as schematically represented in figure 33.

The use of the aforementioned attachment means can simply be derived from figures 30 to 33 and substantially consists in that each piece of skirting board 59, after being coupled with one extremity to a preceding piece 59, is attached at the other extremity against the wall 33, by providing an element 81, such as a screw, nail, or the like through the attachment lip 80 up into the wall 33. It is clear that, when attaching a piece 59, each time the attachment lip 80 of the preceding 59 is put out of sight.

It is clear that the use of a combination of, on the one hand, mechanical coupling means allowing a locking between the successive pieces 59 with, on the other hand, attachment means that are provided such that they are put  
5 out of sight when each following piece 59 is mounted, allows an advantageous and smooth mounting of the skirting board, regardless of the nature of these coupling means and attachment means.

10 It is also clear that according to variants, also other forms of embodiments of attachment means are possible. So, for example, may the lip 82 represented in figure 31 be realized rather long, as a consequence of which this lip can be used as an attachment means, on account of the  
15 fact that then also a nail, screw or the like can be applied therethrough.

According to a variant, also a strip 79 can be provided against the rear side of the skirting board 1, which  
20 strip 79 is provided with a special profile and allows to connect the skirting board 1 with accessories provided against a wall 33, for example, to fasten it on attachment clips.

25 Figure 34 illustrates a method for manufacturing a skirting board 1 according to the aforementioned fourth aspect of the invention, whereby here, both a short piece of skirting board 59, for example, with the typical length of a floor tile, for example, less than 70 cm, or  
30 of a typical floor panel, as a longer piece of skirting board 1, for example, in the order of magnitude of two meters or more, may be concerned. In this method, one starts from laths or strips of a laminate material 6 consisting of a core 7 and a top layer 8, specifically of

the DPL type. As can be seen in figure 34, a material part 83 is removed in the longitudinal direction of this lath, whereby, as represented in the enlargement of figure 35, preferably also a weakened zone 84 is formed, whereby material is removed, in this example partially up into the top layer 8. Hereby, two parts are created, in the represented example two structural parts 2 and 3, which are only connected to each other by a portion of the top layer 8. Then, the skirting board 1 can simply be realized by turning the parts 2 and 3 around the thus created folding or breaking line 85 towards each other and joining them, whereby they are attached to each other, for example, by means of glue, and in this manner a condition is obtained as illustrated in figure 36.

It is underlined that the fourth aspect of the invention is specifically connected to the use of a top layer 8 in the form of so-called "DPL", which then, as known, is formed of one or a small number of resin-impregnated carrier sheets, amongst which mostly a decor layer, which sheets are directly pressed onto the underlying substrate, in this case, the material of the core 7. In figure 35, schematically a top layer 8 consisting of DPL is represented, with only a single printed carrier sheet 87 impregnated with resin 86, said sheet then forming the aforementioned decor layer 9. It is noted that figure 35 is highly schematised and the top layer 8 is represented with exaggerated thickness. In reality, with DPL a layer in the order of magnitude of 0,2 mm or smaller is concerned. Of course, the invention according to the fourth aspect also relates to applications in which DPL with more than one support sheet is applied, for example, DPL formed of the combination of a decor layer and a so-called overlay.

Further, it is noted that the inventors surprisingly found out that, in case a weakened zone 84 is formed whereby material is removed partially up into the "DPL" top layer 8, the skirting board 1, after joining the two obtained parts 2 and 3, has an edge that is of a strikingly high quality, whereby little or no post-treatment is necessary. With thin and brittle top layers 8, such as the one of "DPL", it was always assumed that forming a weakened zone 84 extending at least partially into the top layer 8 and/or accurately breaking and/or accurately folding it, was impossible.

Due to the fact that a DPL top layer 8 has a very small thickness, the advantage is obtained that when turning along the folding or breaking line 85, already a relatively proper finished corner is obtained affording little or no finishing treatment, which is even promoted by using, as aforementioned, a weakened zone 84 partially extending up into the top layer 8.

The inventors also found that in case the weakened zone 84 is realized less deep and below this weakened zone 84 a very small amount of material of the core 7 is left at the place where the parts 2 and 3 must be folded and/or broken, still a qualitatively rather good corner finish is obtained, in particular with a core 7 of MDF or HDF. Preferably, here an amount of material with a thickness of less than 0,5 mm is concerned.

According to a not-represented variant of the invention, at the location of the second part all material except the DPL top layer 8 is removed, whereby the second part then no longer is a structural part.

Figure 36 represents the obtained product. As represented in the figure, possible post-treatments of the edge may consist of the removal of a small material portion, for example, by means of a sanding treatment, for example, as schematically represented, by moving along the edge with a sanding element 88, whether or not followed by the provision of a decorative layer 23 on the obtained surface, as represented, for example, in figure 37, by means of a colouring treatment, in this case by means of a pen 89 or the like. Of course, any other colouring method is possible. Nothing impairs that the colouring treatment takes place without a preceding sanding treatment, whereby the colouring then is intended for masking possible discolorations due to the bending and/or breaking of the top layer 8 and/or to grinning-through of underlying material.

Instead of moving along the edge with a sanding element 88, the edge also can be brought into contact with a preferably heated pressing-down element, such as a sliding block or roller, such that the possibly coarse edge is smoothened. Of course, this may also take place in combination with a sanding treatment.

Figure 38 shows that a material portion can be removed on the edge, for example, for forming a bevel, and whereby the obtained surface is provided with a decorative layer 23.

It is noted that the technique of figure 38, according to which a material portion is removed and a decorative layer 23 is provided, also is advantageous for any other type of skirting board 1, whereby a laminated surface is

present both at the front side 4 and the upper side 5. By means of the aforementioned technique, in fact the advantage is created that a proper edge finish can be obtained and the occurrence of problems due to a difficult mutual adjoining of the laminated surfaces is excluded. According to a fifth aspect, the invention thus in general also relates to skirting boards with a laminated surface, with as a characteristic that a material portion is removed at their edge and a decorative layer 23 is provided at their surface.

For clarity's sake, figure 39 shows another possible form of embodiment of this fifth aspect. The skirting board 1 has a laminated surface both at its front side 4 and at its upper side 5. In this example, the laminated surface at the front side 4 is formed by DPL or HPL, whereas the laminated surface at the upper side 5 is formed by a glued-on laminate ribbon 90. In that use is made of a bevel and a decorative layer 23, which are applied after the application of the laminate ribbon 90, no high precision is necessary when applying the laminate ribbon 90 itself.

In general, it is noted that the invention is intended in particular for being used with skirting boards with a laminated surface of the type formed by thermo-hardening laminate, for example, DPL on the basis of a thermo-hardening resin, such as thermo-hardening melamine resin. However, this does not imply an exclusion of other applications.

The present invention is in no way limited to the forms of embodiment described by way of example and represented in the figures, however, such skirting board, such floor

covering system, said floor panels and said methods for manufacturing a skirting board can be realized according to different variants, without exceeding the scope of the invention.

5

So, for example, the aforementioned finishing treatments, such as the application of a component in the impressions, the glossing of the laminate surface, must not necessarily take place prior to forming the parts 2 and 3 or prior to the application of the laminate film. This may also take place after the assembly of the parts 2 and 3 or after the application of the laminate film at the remaining parts of the skirting board.

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In the previous description the term "laminate material" always refers to board shaped material having a core and a top layer. The core may consist of one or more parts or layers. The term "laminate plate" refers to the basic board before being cut into pieces. The term "laminated" means that the related surface is provided of a laminate of any type. The term "laminate film" refers to a thin foil of any kind of laminate, which is produced as a separate layer. A "laminate ribbon" is a strip-like portion of a laminate film.

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The aforementioned "joints" should generally be understood as being an imitation of "grouts", although they do not always need to imitate cement.

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The thickness of the laminate material 6 will generally be 7 to 9 mm, although other possibilities are not excluded.